

Sources and Air Carrier Use of Aviation Weather Information

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Flight Standards Service
Washington, D.C. 20591

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Federal Aviation Administration

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One company, (**E**), provides the following **NWS** and **FAA** weather information to their customers: convective outlooks, area forecasts, **forecast winds aloft, terminal** forecasts, **NOTAMS**, hourly surface observations, radar reports, narrative radar summaries, **TAFS, PIREPS, AIRMETS, SIGMETS**, convective **SIGMETS, severe weather** watches, last three **SAs/FTs/NOTAMS** from specific stations, and current **SAs/FTs/NOTAMS** from point

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The other end of the spectrum, in the trunk carriers, is **(C)**. This is a carrier that uses two vendor services, one as a backup, but is unable to justify the continuing operation of a meteorology department. They gather basic **NWS** data, and have one service, Lockheed Met Plan, as a backup. The primary service they use, **Kavouras**, provides the basic weather information, twice daily system weather briefings, and transmission of radar coverage from the **NWS** radar sites, for use in their operations area. They estimate a cost of about **\$75,000** per year for some services and don't know the cost of others. They provide their pilots weather briefings that include surface observations (**SAs**), special observations (**SPs**), terminal forecasts (**FTs**), and **NOTAMS** for the stations of departure, destination and alternate, **SIGMETS**, abbreviated winds-aloft forecasts, and **SAs** and **SPs** for a small number of en route stations. Although the carrier indicated that area forecasts were included in the weather briefing package, they were absent from the sample dispatch packages shown the study team. This format holds true for all flights, whether **300** miles or **3,000** miles, according to the people interviewed. The one exception is the international weather package, which includes some graphics, which is legally required to be given any international departure at the station where it departs the continental limits of the United States.

The regional carriers run the gamut from having pilots **self-brief** at **FSSs** to elaborate weather gathering rivaling **some of** the trunk carriers, and surpassing others. Since they are, by definition, **"regional"** in character, a poor forecast, or a badly phrased conditional remark in a forecast, can close down their entire operation for a period of time - sometimes days at a time. A conditional remark, indicating the possibility of weather conditions which may be below the approach or departure minimums for the carrier, would be

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	MAJORS					REGIONALS														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q			
PONT OF ORIGIN																				
SAs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SPs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FTs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FIED CONDITIONS																				
NOAMS	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			
TAKEOFF ALTERNATE (IF NEEDED)																				
SAs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SPs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FTs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FIED CONDITIONS																				
NOAMS	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			
DESTINATION																				
SAs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SPs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FTs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FIED CONDITIONS																				
NOAMS	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			
ALTERNATE																				
SAs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SPs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FTs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FIED CONDITIONS																				
NOAMS	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			
PROVIDED FOR AREA OF DESTINATION, DEPARTURE, OR ALTERNATE																				
SAs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SPs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FTs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FIED CONDITIONS																				
NOAMS	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			
AREA FORECASTS																				
DEPARTURE AREA	X	X		X		X	X	X		X	X	X	X				X			
ENROUTE AREA	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X			
DESTINATION AREA	X	X	X	X	X	X	X	X		X	X	X	X	X			X			
ALTERNATE AREA	X	X	X	X	X	X	X	X		X	X	X	X	X			X			
ENROUTE SAs	X					X														
SKEDS	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
AIRPETS																				
THROPAUSE	X	X	X	X	X	X	X	X		X	X	X	X							
WINDS/TEMPERATURES ALOFT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
TURBULENCE PLOTS						X														
METEOROLOGY DEPARTMENT		X			X	X	X													

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SPs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FTs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FIED CONDITIONS																				
NOWMS	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			
TAKEOFF ALTERNATE (IF NEEDED)																				
SAs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SPs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FTs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FIED CONDITIONS																				
NOWMS	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			
DESTINATION																				
SAs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SPs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FTs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FIED CONDITIONS																				
NOWMS	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			
ALTERNATE																				
SAs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SPs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FTs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
FIED CONDITIONS																				
NOWMS	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			
PROVIDED FOR AREA OF DESTINATION, DEPARTURE, OR ALTERNATE																				
SAs	X	X	X	X	X	X	X	X				X								
SPs	X	X	X	X	X	X	X	X				X								
FTs	X	X	X	X	X	X	X	X				X								
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NOWMS	X	X	X	X	X	X	X	X				X								
AREA FORECASTS																				
DEPARTURE AREA	X	X		X		X	X	X		X	X	X	X							
ENROUTE AREA	X	X	X	X	X	X	X	X			X	X	X	X		X				
DESTINATION AREA	X	X	X	X	X	X	X	X		X	X	X	X	X						
ALTERNATE AREA	X	X	X	X	X	X	X	X		X	X	X	X	X						
ENROUTE SAs	X					X														
SKEDS	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
AIRPETS								X	X	X	X	X	X	X	X					
THROPAUSE	X	X	X	X	X	X	X													
WINDS/TEMPERATURES ALOFT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
TURBULENCE PLOTS						X														
METEOROLOGY DEPARTMENT		X			X	X	X													

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All of these are valid comments and worthy of scrutiny. The **fact** that not all of them are in full accord only serves to point up the variant state of the industry. However, most of them indicate a belief that something is lacking in the weather training and information provided crews. Most of the respondents seem to feel that more training and information should be forthcoming to better enable proper flight planning, and enhance the safety of flight. Another belief expressed by most respondents is that the quality and amount of both training, **and** weather information provided, have diminished since deregulation.

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All of these are valid comments and worthy of scrutiny. The **fact** that not all of them are in full accord only serves to point up the variant state of the industry. However, most of them indicate a belief that something is lacking in the weather training and information provided crews. Most of the respondents seem to feel that more training and information should be forthcoming to better enable proper flight planning, and enhance the safety of flight. Another belief expressed by most respondents is that the quality and amount of both training, **and** weather information provided, have diminished since deregulation.

13.6 Is training given in high altitude meteorology such as mountain **wave, clear air turbulence, etc.?**

13.6.1 What does it consist of? _____

13.7 Would it be possible to get copies of the syllabus and materials for training on weather and seasonal reviews?

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